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EXAMINER

DINH, TUAN T

ART UNIT PAPER NUMBER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 21

Application Number: 09/628,442  
Filing Date: July 28, 2000  
Appellant(s): RUQUE, CHRISTIAN

Billy Carter Rauderson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 03, 2003.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims incorrect in the brief is correct. The explanation s correct, but the claims on appeal are 1-9, and 1 because claim 10 has been object as allowable subject matter in paper #16.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1-11 (claim 10 is objected) stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

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**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

US 5,808,866	Porter	09/1998
US 5,949,645	Aziz et al.	09/1999
US 6,209,842	Anderson et al.	04/2001

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Aziz et al. (U.S. Patent 5,949,645).

As to claim 1, Aziz discloses a device (10-figure 1, column 4, line 58) as shown in figures 1-21 for electromagnetic protecting a drawer (20; 22, column 4, lines 66-67) equipped with electronic cards (82, 84, column 7, line 41), said drawer (20 or 22) for being inserted into a drawer receiving structure (see figure 2) through an opening provided in a front face (see figure 2) of said drawer receiving, said device comprising:

six faces (see figures 2 and 8) distributed around the cards (82, 84), wherein one of said faces of said device is formed by the front face (see figure 2) of said drawer,

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while the five other faces of the device are formed by side faces (14), a top (18) and a bottom faces (16, column 4, lines 64-65) and a back face (not shown) of said drawer receiving structure; said faces being formed by electrically conductive (see cross-hatching of figures 3, 4, and 6-7, a service carrier 22 made of metal).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz et al. (U. S. Patent 5,949,645) in view of Anderson et al (U. S. Patent 6,209,842).

As to claim 2, Aziz does not teach resilient electrical means for providing electrical connection between said front face of said drawer and said drawer receiving-structure.

Anderson discloses a device as shown in figures 4-5 comprising resilient electrical connection means (405, column 3, line 65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use resilient electrical means as taught by Anderson to employ the device of Aziz in order to reduce vibration transmitted when a module inserted into a chassis of a device.

As to claim 3, Anderson discloses a device as shown in figures 4-5 wherein said resilient means (405) are formed by electrically-conductive springs disposed on the edges of the opening provided in the front face of the structure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use resilient means are formed by electrically-conductive springs as taught by Anderson to employ the device of Aziz in order to provide an easy snap insertion of the module inserted into the device.

Regarding claim 9, Aziz discloses all of the limitations of the claimed invention, except for an intermediate plate disposed between two adjacent drawers.

Anderson shows an intermediate plate disclosed in figure 1 to separate between two modules.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an intermediate plate as taught by Anderson to employ the device of Aziz in order to protect against an EMI from the modules when inserted into the device.

Claims 4-8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz in view of Porter (U. S. Patent 5,808,866).

As to claims 4-6, and 11, Aziz discloses a device as shown in figures 8-9 wherein said drawer-receiving structure is provided with connectors (190, 186-figure 8) suitable for cooperating with connectors (178, 190-figure 9) secured to the cards. Aziz does not show said back face is a grating with openings for passing cables.

Porter discloses a device as shown in figures 2 and 5 wherein a back face (24), of a drawer-receiving structure is provided with connectors (30) suitable for cooperating with connectors secured to the cards (31). The back face (24) is a grating provided with openings (the openings 33 of top and bottom panels 27, 28 would be the same as the openings of the back face 24) for passing cables (42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Aziz provide the back face having openings for passing cables as taught by Porter in order to make an electrical communication connection to another source.

As to claim 7, Porter discloses a device as shown in figure 2 wherein the sum of the areas of the openings in each of the top and bottom faces (27, 28) is approximately equal to the area through which air can pass vertically in the drawer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Aziz to provide the areas of the openings in each of the top and bottom faces is approximately equal to the area through which air can pass vertically in the drawer as taught by Porter in order to permit a large volumetric flow of air sufficiency to cool the device.

As to claim 8, Aziz and Porter do not teach the maximum dimension of the openings is considerably smaller than the minimum wavelength of the electromagnetic waves from which the drawer is to be isolated. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a size of the openings and compare with wavelength of the electromagnetic waves in order to

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3provide an electromagnetic isolation structure and also reduce heat from electronic components inside the structure. Since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch. 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

**(11) Response to Argument**

(a) Applicant argues that examiner is rejected the limitation of "said faces being electrically conductive" under 35 U.S.C. 112, second paragraph, which is not appropriate.

Response to argument (a), Applicant is correct. Examiner agrees to withdrawn 35 U.S.C. 112, second paragraph.

(a') Applicant argues that Aziz is silent as to "electromagnetically protecting a drawer equipped with electronic cards.

Examiner disagrees. Applicant recites the limitation in claim 1 that " a device for electromagnetically protecting a drawer equipped with electronic cards", which is a functional language and intended use of a device. This limitation is not a positive claim. Aziz discloses an electronic unit with a motherboard carrier and service carrier in a housing capable of being had a function as electromagnetically protecting the electronic unit.

(a'') Applicant argues that Aziz fails, to disclose, "one of the faces of the device is formed by the front face of a drawer." It is incorrect. Aziz clearly shows, for example in figure 10, a front wall (40) of drawer (22, 24) formed as a front face/cover of a drawer (22; 24).



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(b) Applicant argues that Aziz fails to show "the front cover/face is non-conductive " and also, applicant shows Aziz's reference in figure 2 the front cover (24) not belong to the drawer (20). It is incorrect. Aziz's reference shows in figure 3 disclosed a front wall (40) forming as a front face/cover of the drawer (20; 24) and made by metal material (se cross-hatching of figures 1-10). The metal has properties of conductivity.

(d) Applicant argues that Aziz does not disclose "the six faces of the device are electrically conductive because the front face is non-conductive" It is incorrect.

Aziz discloses motherboard and service carriers (20, 22) having six faces (14, 18, 16, 40 and back face not shown) made of metal (see cross-hatching from figures 3-4, and 7), the faces being formed electrically conductive because the metal has conductivity (i.e. for ground or shield purpose).

(e) Applicant argues that Aziz in view of Anderson, fail to teach, "a resilient electrical connection means for providing an electrical connection between the front face of the drawer and the drawer receiving structure" It is incorrect. Applicant recites the limitation of "the resilient electrical connection means is formed by electrical conductive spring" disposed on an edge of the front face of the structure and/or on the drawer make it possible to provide electrical continuity between...structure, see page 3, lines 25-34.

Anderson teaches a damping device (405; 600) in figures 4-6 for protect a vibration problem made of conductive material (see figures 4-5), the damping device has at least one portion/part (601, 603) made by **metal or stainless steel** that is

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capable of being provided as an electrical connection (for example: grounding or shielding) between a front face of a drawer (carrier 200) and drawer receiving structure (chassis) when the drawer (200) is inserted into the drawer receiving structure (100).

(f) Applicant argues that Aziz in view of Anderson, do not teach, "the resilient electrical connection means is formed by electrical conductive spring" It is incorrect. As explanation from argument (e), Anderson shows the electrical connection means or the damping element (405, 600), which is resilient or deflective when the drawer (carrier 200) inserted into the drawer receiving structure (chassis 100).

(g) Applicant argues that Aziz in view of Anderson, do not teach, "drawer receiving recesses for two adjacent drawers are separated by an intermediate electrically-conductive plate suitable for creating electromagnetic isolation between two recesses." It is incorrect. Applicant describes in specification, page 10, lines 13-14, figure 5 that the "drawer receiving recesses (76) for two adjacent drawers are separated by an intermediate electrically-conductive plate (74) suitable for creating electromagnetic isolation between two recesses."

The limitation of "...suitable for creating electromagnetic isolation...", which is a functional language, and not a positive claim.

Anderson teaches a chassis capable of being a drawer receiving structure having recesses and a divider (see figure 1 shows the recesses on top and bottom faces and the divider for dividing the carriers 200 when inserted into the chassis 100) as an intermediate electrically conductive plate functioning to separate between two inserted-carriers (200). The divider or the intermediate plate as a function providing separating

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some electronic devices for purpose of prevent and against an EMI from the electronic device when operates.

(h) Applicant argues that Aziz in view of Porter, do not teach, "said back face is grating provided with opening for passing cables for connecting to said connectors of said structure" It is incorrect.

Porter shows in figures 2 and 5 a structure comprising a back face (24-figure 2) having a plurality of openings (33-figure 2), and the limitation of "for passing cables for connecting to said connectors of said structure" which is a functional language and not positive claim.

(i) Aziz in view of Porter, do not teach, "the sum of the areas of the openings in each of the top and the bottom faces is **approximately equal** to the area through which air can be pass vertically in said drawer" Examiner disagrees. Porter shows "the sum of the areas of the openings (33)" in each of the top and the bottom faces (27, 28-figure 2) is **approximately** equal to the area through which air can be pass vertically in said drawer"

(j) Aziz in view of Porter, do not teach, "a maximum linear dimension of said openings is considerably smaller than a minimum wavelength of electromagnetic waves from which said drawer is to be isolated" Examiner disagrees.

Aziz in view of Porter do not teach a limitations of claim 8; however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a size of the openings and compare with wavelength of the electromagnetic waves in order to provide an electromagnetic isolation structure which reduce heat from

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electronic components inside the structure. Since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch. 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

**Tuan Dinh**  
August 23, 2003

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**EVAN PERT**

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